NOTES ON NEOTROPICAL ORCHIDACEAE

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ABSTRACT

Examination of the type specimen of Dendrobium mexicanum Presl shows the name to be synonymous with the widespread Eulophia alta (L.) Fawc. & Rendle. Homalopetalum costaricensis Schltr. is neotypified and placed in the synonymy of H. pumilio (Reichb. f.) Schltr. together with H. lehmanniana (Kraenzl.) Schltr. Anthocyanin free forms of Bollea violacea (Lindley) Reichb. f. and Oncidium lanceanum Lindley are described. The combination Rodriguezia candida (Lindley) E.A. Christenson is made.

KEY WORDS: Orchidaceae, Bollea, Dendrobium, Eulophia, Homalopetalum, Oncidium, Rodriguezia, taxonomy

BOLLEA

Bollea violacea (Lindley) Reichb. f. forma alba E.A. Christenson, forma nov. TYPE: FRENCH GUIANA. photo. ex hort. C. Pavilowski (AMES).

A forma typica floribus albis differt.

Bollea violacea is a lowland species distributed from Venezuela to Brasil and is known from all three of the Guianas. The flowers are typically a muddy violet. Bollea violacea f. alba bears white flowers with a cream colored callus.

A second, earlier collection of this form from French Guiana is probably represented at P by Sagot 1141 ("flos album").

EULOPHIA

Frequently, early names in the Orchidaceae are difficult to place among currently accepted taxa. Elucidation of early names, however, is necessary if stable nomenclature is to be achieved. Nomenclatural problems are aggravated by binomials "lost" in genera long excluded from floristic zones, those not generally considered during modern floristic work, and in monographs of unrelated genera. One example is the genus *Dendrobium Sw.*, a genus now considered to be wholly paleotropical.

Among the Neotropical taxa described in *Dendrobium* prior to its modern circumscription is *Dendrobium mexicanum* Presl. The binomial was overlooked by previous orchid researchers working on the floras of México and Mesoamerica (q.v., Williams 1951, 1956).

Examination of the holotype of *Dendrobium mexicanum* Presl at Prague shows it to be the ubiquitous Neotropical terrestrial *Eulophia alta* (L.) Fawc. & Rendle. The *Dendrobium* name has not been considered in recent treatments of *E. alta* (e.g., Dodson & Vasquez 1989; Hamer 1985). It is reduced to synonymy here:

Eulophia alta (L.) Fawc. & Rendle, Fl. Jam. 1:112. 1910. BASIONYM: Limodorum alta L., Syst. Pl., ed. 12, 2:594. 1767.

Dendrobium mexicanum Presl, Rel. Haer.keanae 102. 1830. HOLO-TYPE: MEXICO. Haenke s.n. (PR!).

Eulophia alta is widespread both in Africa and from Florida to southern South America in the Neotropics. For its extensive synonymy, not repeated here, see, for example, Cribb (1989) or Garay & Sweet (1974). A photograph of the holotype of Dendrobium mexicanum has been deposited in the Orchid Herbarium of Oakes Ames (AMES) at Harvard University.

HOMALOPETALUM

Homalopetalum pumilio (Reichb. f.) Schltr., Repert. Spec. Nov. Regni Veg.
Beih. 19:48. 1923. BASIONYM: Brassavola pumilio Reichb. f., Linnaea 18:402. 1844. TYPE: MEXICO. Leibold s.n. (C). Bletia pumilio (Reichb. f.) Reichb. f., Ann. Bot. Syst. 6:433. 1862. Pinelia pumilio (Reichb. f.) Schltr., Beih. Bot. Centralbl. 36:478. 1918.

Pinelia lehmanniana Kraenzl., Bot. Jahrb. Syst. 26(5):479. 1899.
TYPE: COLOMBIA. circa Tunia et el Hatico, 1600-1800 m, Lehmann 6104 (AMES [10372, 14614]; GH [4263]; NY). Restrepia lehmanniana (Kraenzl.) Schltr., Repert. Spec. Nov. Regni Veg. 3:277. 1907. Homalopetalum lehmanniana (Kraenzl.) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 19:48. 1923.

Homalopetalum costaricense Schltr., Repert. Spec. Nov. Regni Veg. Beih. 19:47. 1923. TYPE: COSTA RICA. La Palma, Werckle 94 B (destroyed). NEOTYPE (here designated): COSTA RICA. San Pedro de San Ramón, 1200 m, 27 Apr 1923, Brenes 2963 (246) (NY).

Pinelia tuerckheimii Kraenzl., Ann. Naturhist. Mus. Wien 44:326. 1930. TYPE: GUATEMALA. Coban, ca. 1450 m, Tuerckheim 32.

The genus Homalopetalum appears to comprise four species: H. pachyphyllum (L.O. Wms.) Dressler and H. pumilum (Ames) Dressler confined to México; H. vomeriforme (Reichb. f.) Fawc. & Rendle, endemic to Jamaica; and H. pumilio (Reichb. f.) Schltr., ranging from México to Ecuador. Homalopetalum pumilio differs from the closely related H. vomeriforme by having a pair of prominent keels at the base of the labellum and by having an expanded labellum significantly wider than the tepals, unlike the proportionately narrow labellum similar to the tepals in H. vomeriforme.

Traditionally thought to be confined to Mesoamerica, the range of Homalopetalum pumilio was extended to Ecuador by Dodson & Dodson (1984) based on Dalstrom 385 (SEL!). At that time they listed the range of H. pumilio to include Colombia without citation of specimens. The only Homalopetalum species previously recorded from Colombia had been H. lehmanniana (Kraenzl.) Schltr., based on Pinelia lehmanniana Kraenzl. Examination of an isotype (Lehmann 6104 NY!) shows the Colombian plants to be identical to H. pumilio, confirming published distribution records.

The name Homalopetalum costaricensis Schltr. has been difficult to place with certainty due to the destruction of the holotype at Berlin and the apparent lack of any isotype or other authentic material. After examining all specimens of Homalopetalum from Costa Rica, I am unable to identify any material that differs from H. pumilio. The minor differences cited in the protologue for H. costaricensis are within the variation accepted in H. pumilio. I take this opportunity to neotypify Schlechter's taxon based on a Brenes collection. Schlechter worked extensively with Brenes collections (q.v., Barringer 1986) and the designated neotype was identified as H. costaricensis by Brenes. It is not known if Schlechter saw a duplicate of this Brenes collection, however.

It should be noted that the *Index Kewensis* cites later places of publication for *Homalopetalum lehmanniana* and *H. pumilio*.

ONCIDIUM

Oncidium lanceanum Lindley forma aureum E.A. Christenson, forma nov. TYPE: FRENCH GUIANA. photo. ex hort. C. Pavilowski (AMES).

A forma typica floribus aureis differt.

Oncidium lanceanum is garishly colored, having yellow tepals overlaid with brown spotting, contrasted with a purple labellum. Previously, only one color variation was recognized, O. lanceanum var. louvresianum Reichb. f., distinguished by its white labellum midlobe on an otherwise normally colored flower. Oncidium lanceanum f. aureum represents a clone completely devoid of anthocyanin in the flowers; the tepals are yellow and the labellum is pure white. Because orchids devoid of normal anthocyanins are choice horticultural subjects, this rare color form is given formal nomenclatural designation. The aureum form has been illustrated in L'Orchidophile (84:196. 1987).

RODRIGUEZIA

Rodriguezia candida (Lindley) E.A. Christenson, comb. nov. BASIONYM:
Burlingtonia candida Lindley, Bot. Reg. 23: t. 1927. 1837. TYPE:
GUYANA. Demerara, Colley ex hort. Bateman s.n. (K). Rodriguezia
candida Bateman ex Lindley, Bot. Reg. 23: sub t. 1927. 1837, nom.
invalid.

This showy species from Brasil, Venezuela, and the Guianas has been consistently called Rodriguezia candida Bateman ex Lindley (q.v., Dunsterville & Garay 1979; Foldats 1970). That name, published as a synonym of Burlingtonia candida Lindley, is an invalid name contrary to Article 34 of the International Code of Botanical Nomenclature. However, as an invalid name, Rodriguezia candida Bateman ex Lindley has no nomenclatural standing and thus does not preclude the combination made here (i.e., R. candida [Lindley] E.A. Christenson is not a homonym).

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LITERATURE CITED

Barringer, K.A. 1986. Typification of Schlechter's Costa Rican Orchidaceae I. Types collected by A. Brenes. Fieldiana (Bot.) 17:1-24.

- Cribb, P. 1989. Orchidaceae (Part 3). In: R.M. Polhill (Ed.), Flora of Tropical East Africa. A.A. Balkema, Rotterdam, The Netherlands.
- Dodson, C.H. & P.M. Dodson. 1984. Homalopetalum pumilio. Ic. Pl. Trop., ser. I, pl. 926.
- Dodson, C. & R. Vasquez. 1989. Eulophia alta. Ic. Pl. Trop., ser. II, pl. 233.
- Dunsterville, G.C.K. & L.A. Garay. 1979. Orchids of Venezuela, an Illustrated Field Guide. Botanical Museum, Harvard Univ., Cambridge, Massachusetts.
- Foldats, E. 1970. Orchidaceae. In: T. Lasser (Ed.), Fl. de Venezuela, vol. 15.
- Garay, L.A. & H.R. Sweet. 1974. Orchidaceae. In: R.A. Howard (Ed.), Flora of the Lesser Antilles. Arnold Arboretum, Jamaica Plain, Massachusetts.
- Hamer, F. 1985. Eulophia alta. Ic. Pl. Trop., ser. I, pl. 1222.
- Williams, L.O. 1951. The Orchidaceae of Mexico. Ceiba 2:1-321.
- Williams, L.O. 1956. An enumeration of the Orchidaceae of Central America, British Honduras, and Panama. Ceiba 5:1-256.